

I. REAL PARTY IN INTEREST .....	1
II. RELATED APPEALS AND INTERFERENCES.....	1
III. STATUS OF CLAIMS.....	2
IV. STATUS OF AMENDMENTS .....	2
V. SUMMARY OF CLAIMED SUBJECT MATTER.....	2
VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL.....	2
VII. ARGUMENT.....	4
VIII. CLAIMS APPENDIX.....	16
IX. EVIDENCE APPENDIX .....	19
X. RELATED PROCEEDINGS APPENDIX .....	20

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of : Customer Number: 46320

Virinder BATRA, et al. : Confirmation Number: 3519

Application No.: 10/077,012 : Group Art Unit: 2145

Filed: February 15, 2002 : Examiner: A. Choudhury

For: COMMON LOCATION-BASED SERVICE ADAPTER INTERFACE FOR  
LOCATION BASED SERVICES

**APPEAL BRIEF**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed November 17, 2006, wherein Appellants appeal from the Examiner's rejection of claims 1-6.

**I. REAL PARTY IN INTEREST**

This application is assigned to IBM Corporation by assignment recorded on February 15, 2002, at Reel 012618, Frame 0349.

**II. RELATED APPEALS AND INTERFERENCES**

Appellants are unaware of any related appeals and interferences.

**III. STATUS OF CLAIMS**

Claims 1-6 are pending and are both four-times and finally rejected in this Application. It is from the final rejection of claims 1-6 that this Appeal is taken.

**IV. STATUS OF AMENDMENTS**

The claims have not been amended subsequent to the imposition of the Fourth Office Action dated August 17, 2006 (hereinafter the Fourth Office Action).

**V. SUMMARY OF CLAIMED SUBJECT MATTER**

Referring to Figure 1 and to independent claims 1 and 5, a method of processing requests 125 from location-based service applications 110 for location-based services provided by a plurality of disparate location-based service providers 150 by a location service 140 is disclosed. Different ones of the plurality of disparate location-based service providers 150 specify different formats for receiving the requests 125/135 (page 8, line 21 through page 9, line 6 of Appellants' disclosure). The requests 125 are received for location based-services 140 (page 8, lines 16-22). From each request 125, a particular location-based service provider 150, which can service the request 125, is determined (page 8, line 21 through page 9, line 3). Each request 125/135 is specifically formatted according to a specific format specified by the particular location-based service provider 150 (page 9, lines 12-13). Each result set 115 produced from corresponding ones of the requests 135 is uniformly formatted (page 9, lines 13-18). The uniformly formatted result sets 145 are forwarded to the location-based service applications 110 (page 10, lines 1-8).

Referring to Figure 1 and to independent claim 3, a common location-based service adapter interface 140 that includes a uniform input interface and uniform output interface is

disclosed (page 8, lines 13-20). Location-based services are requested 125 through the uniform input interface using a uniform format which is independent of any specific formatting required by a particular service adapter 150 configured to process the location-based services (page 8, line 21 through page 9, line 11). Specifically formatted result sets can be formatted using the uniform format through the uniform output interface (page 10, lines 1-9). The uniform input interface is adapted to be connected to different service adapters 150 specifying different formats for receiving inputs (page 8, line 21 through page 9, line 6).

**VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

1. Claim 4 was rejected under the second paragraph of 35 U.S.C. § 112; and
2. Claims 1-6 were rejected under 35 U.S.C. § 102 for anticipation based upon Requena, U.S. Patent Publication No. 2002/0126701.

## VII. ARGUMENT

### THE REJECTION OF CLAIM 4 UNDER THE SECOND PARAGRAPH OF 35 U.S.C. § 112

For convenience of the Honorable Board in addressing the rejections, dependent claim 4 stands or falls alone.

After not rejecting the term "generic" in the first two Office Action, the Examiner has rejected claim 4 under the second paragraph of 35 U.S.C. § 112 for indefiniteness on the basis that the term "generic" is "considered broad and indefinite." In responding to Appellants' argument in the Third Response dated June 2, 2006, the Examiner asserted the following on page 5 of the Fourth Office Action:

The first point of contention remarked upon by the applicant involves the 112-type rejection. The applicant contends that, "one having ordinary skill in the art would have no difficulty understanding the scope." This along with the rest of the explanation provided within the amendment received on June 2, 2006 does not overcome the rejection. The term "generic," within the phrase, "generic ones of said location-based service adapter objects" is not well known in the art. It is unclear as to what type of location-based service adapter object qualifies as being "generic." In addition, no clear definition is provided within the specifications. Therefore, the 112-type rejection continues to stand.

Notwithstanding these comments, Appellants respectfully submit that the Examiner has still failed to establish a *prima facie* case of indefiniteness under the second paragraph of 35 U.S.C. § 112. As stated in M.P.E.P. § 2173.02:

If upon review of a claim in its entirety, the examiner concludes that a rejection under 35 U.S.C. 112, second paragraph, is appropriate, such a rejection should be made and *an analysis* as to why the phrase(s) used in the claim is "vague and indefinite" should be included in the Office action. (emphasis added).

As stated in Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings,<sup>1</sup> "[o]nly when a claim remains insolubly ambiguous without a discernible meaning after all reasonable attempts at construction must a court declare it indefinite." The Examiner, however, has not established an interpretation of the claim in light of the specification or an interpretation of the claim as interpreted by one of ordinary skill in the art.

Moreover, the Examiner has failed to set forth any analysis as to why the limitation(s) in the claim does not reasonably define the invention. Without the Examiner clearly defining the alleged problem and why it is a problem in connection with the issue of claim definiteness, Appellants cannot fairly evaluate the Examiner's position. Despite the Examiner's lack of analysis, a dictionary definition<sup>2</sup> of the term "random" is the following:

1. of, pertaining to, or applicable to all members of a genus, class, group, or kind.

As noted by the Examiner, the term "generic" is found in the phrase "generic ones of said location-based service adapter objects." Thus, given the dictionary definition of the term "generic," one having ordinary skill in the art would readily recognize that "generic ones" refers to all members of the genus/class/group of "location-based service adapter objects." Therefore, Appellants respectfully submit that one having ordinary skill in the art would have no difficulty understanding the scope of claim 4,

---

<sup>1</sup> 370 F.3d 1354, 1366, 71 USPQ2d 1081, 1089 (Fed. Cir. 2004).

<sup>2</sup> Webster's College Dictionary, Random House, 1995, pg. 555.

**THE REJECTION OF CLAIMS 1-6 UNDER 35 U.S.C. § 102 FOR ANTICIPATION BASED  
UPON REQUENA**

For convenience of the Honorable Board in addressing the rejections, claim 2-6 stand or fall together with independent claim 1.

The Examiner cited paragraph [0012]-[0016] of Requena to disclose many of the limitations recited in claim 1, and for ease of reference, these paragraphs are reproduced below:

[0012] According to a first aspect of the invention, a method for providing a presence service over an internet protocol network comprises the steps of receiving application layer signaling from users registering for said presence service, checking said signaling for spatial location information, and storing said spatial location information for use in providing said presence service.

[0013] Further according to the first aspect of the invention, said application layer signaling is according to a session initiation protocol.

[0014] Further still according to the first aspect of the invention, said spatial location information is received as a spatial location payload.

[0015] Further in accordance with the first aspect of the invention, the step of providing provides access to said spatial location information to one or more location based services.

[0016] Further still in accordance with the first aspect of the invention, said access to said spatial location information is provided to said one or more location based services without providing access to associated user identity information.

As noted by Appellants on page 6 of the Second Response, these passages are only a summary and provide little descriptive details as to specifics involved.

---

In the Second Response dated December 13, 2005, Appellants argued that disclosure by Requena of using spatial location for use in providing a presence service does not identically disclose the claimed determining, from a request, a particular location-based service provider that can service the request. On page 5 of the Third Office Action, the Examiner responded to this argument by asserting:

It is well known that since multiple location-based service providers exist and only one is needed to serve the request, that one of the plurality is selected.

Appellants responded to this argument in the Third Response by referring the Examiner to M.P.E.P. § 2112, entitled "Requirements of Rejection Based on Inherency; Burden of Proof," since the Examiner has not met the requirements to establish that the missing feature is inherently disclosed by the applied prior art. Appellants position was that Examiner's is making an assertion without factual support, and if these "facts" are well known, then the Examiner is obligated to provide evidence of these facts.

The Examiner responded to this argument in paragraph spanning pages 5 and 6 of the Fourth Office in which the Examiner asserted the following:

The second point of contention remarked upon by the applicant involves the feature of "determining from a request a particular location-based service provider that can service the request." The examiner has maintained that Requena teaches such a feature within paragraphs 12-16. Within those portions of the disclosure, Requena teaches that "provides access to said spatial location information to one or more location based services." Requena also teaches within the disclosure of the invention within page 1, that such information is provided in response to a request. Applicant contends that the examiner has not met the burden of proof and alleges that inherency was applied with respect to the rejection of this particular feature. Close examination of the office action mailed on March 2, 2006 reveals that the actual rejection placed for the feature of "determining from a request a particular location-based service provider that can service the request" does not rely on inherency. Instead, the rejection for that feature stated then and still does state "Requena teaches a design allowing location based services to receive requests from users (paragraphs 12-16, Requena)." Only within the "response to remarks" portion does the examiner explain that such a feature is well known. Such remarks were only additional explanations and are not the sole rejections. The examiner has thus provided a rejection based on factual support.

The above-reproduced paragraph by the Examiner raises several issues. The first issue is that the Examiner has still failed to specifically identify where Requena explicitly teaches the claimed limitation of "determining from each said request a particular location-based service provider which can service said request." Providing access to spatial location information to one or more location based services is not comparable to determining, from a request, a particular location-based service provider. As can be readily envisaged, a particular location-based service provider may be selected, for example, based upon the physical distance of the location-based

service provider from where the request is received or based upon some other factor completely unrelated to the request itself.

Appellants note that the Examiner made the following new statement that "Requena also teaches within the disclose of the invention with page 1, that such information is provided in response to a request." Notwithstanding that it is unclear as to exactly what passage in page 1 supports this assertion given the Examiner's failure to specifically identify the passage being relied upon, the alleged teaching of providing information in response to a request is not identical to determining a location-based service provider based upon the request. As already noted above, a determination of the location-based service, to which information is provided in response to a request, as taught by Requena, does not necessarily have to be based upon the request itself. Instead, the determination of the location-based service may be based upon some other factor.

Since the Examiner has not specifically established where Requena explicitly identically discloses this particular limitation, Appellants have previously proceeded under the assumption that the Examiner is relying upon an inherency argument. However, as noted by the Examiner in the above-reproduced paragraph, the Examiner is not relying on inherency to disclose the claimed limitation at issue. Despite the Examiner's contention that Requena explicitly identically disclose the limitation at issue, Appellants respectfully disagree for the reasons set forth above.

---

In the Second Response, Appellants presented the argument that the Examiner's reliance upon the doctrine of inherency to disclose the claimed formatting is misplaced, and that the Examiner has improperly asserted that "[f]ormatting is required since each user's device may be using a different format and multiple users are permitted within the design." On page 5 of the Third Office Action, the Examiner responded to this argument by asserting:

The examiner has currently cited portions of the reference in addition to the inherency rejections. In addition, the examiner continues the inherency rejection because it is inherent in a networking design that data is converted when transferred between two networked devices.

Appellants responded to these assertions in the Third Response by arguing that the Examiner's assertion that "data is converted when transferred between two networked devices" again lacks factual support. The Examiner has provided no evidence for the assertion that data is necessarily converted when transferred between two networked devices. Not all data undergoes conversion when being transferred between devices. For example, if the network devices are of the same type or were intended to work together, there may not be a need to have the data transferred between the devices undergo conversion. Therefore, it is improper for the Examiner to make this inherency argument.

The Examiner responded to these arguments in paragraph spanning pages 6 and 7 of the Fourth Office, in which the Examiner asserted the following:

The third point of contention remarked upon by the applicant involves the feature of "formatting each said request according to a specific format specified, by said particular location-based service provider." The applicant again alleges that no evidence was provided that data is necessarily converted when transferred between devices. First, in a basic explanation, to send data between two networked devices, data has to be converted from its original format into packet format by the sending device and the receiving device has to convert that packet format into a usable data format. This is the basics of data transferring in networks and is extremely well known within the art. Hence, it was stated as being inherent. Support can be found within various sources from the OSI model (easily found within the internet or introduction to networking book) to RFC documents (RFC 791 for instance which can be found on the internet).

The Examiner's assertions loses track of the forest while focusing on the trees. The limitation at issue is the following "specifically formatting each said request according to a specific format specified by said particular location-based service provider." The Examiner's assertion that "data has to be converted from its original format into packet format" since "[t]his is the basics of data transferring in networks" loses track of the claimed limitation that the formatting is "according to a specific format specified by said particular location-based service provider." The "formatting" (i.e., transforming data into packets) alleged by the Examiner is not specified by the particular location-based service provider. Instead, this formatting is specified by the various standards associated with a particular network through which the data is sent.

The Examiner further asserted the following in the same paragraph spanning pages 5 and 6 of the Fourth Office Action:

In addition, the examiner provided within the previous office action and continues to provide in the current office action the citations within the prior arts supporting the teaching of the claimed feature, as it is currently claimed (see paragraphs 75, 105 and 130, Requena). Requena teaches within paragraph 105 that multiple data formats are supported. To allow the multiple format support, each device must have means by which to convert data from one format to another. Hence, data format conversion means are inherently present and are also taught by Requena.

For ease of reference, paragraph [0105] of Requena is reproduced below:

[0105] It supports different location data representations/expressions. For interoperability reasons, it has an absolute location system as the supported format by all the service speakers. It lists all other absolute location systems and their data formats, which may be supported by the service elements on an optional basis. It also supports for descriptive locations while no syntax and standard is defined in the current architecture scope.

Similar to paragraphs [0012]-[0016], which were cited by the Examiner and reproduced above, paragraph [0105] only lists particular requirements of the system's architecture yet this paragraph provides little descriptive details as to specifics involved. Although the Examiner asserts that "each device must have means by which to convert data from one format to another" (emphasis

added), this is neither factually supported or factually correct. *Assuming arguendo* that Requena contemplates devices having different supported formats communicating with one another, each device need not have means to convert data. Instead, only a single device needs to have this particular capability. For example, the request can be formatted prior to being sent, or the request can be formatted after being received. The claimed invention recites that the location service performs the steps. However, the passage cited by the Examiner is completely silent as to what particular entity performs the formatting, if formatting is disclosed. Therefore, Requena fails to identically disclose this particular limitation.

---

The Examiner also asserted the following on page 5 of the Third Office Action in response to Appellants' inherency arguments:

The examiner would also like to remind the applicant's representative that inherency is applied in a rejection when a feature is known in the art to be mandatory. Finally, when reading prior art, it is important to not only attain a literal interpretation of the disclosure but to also attain an understanding of the spirit of the design.

Appellants responded to the first of the above assertions in the Third Response by referring to a previously made argument that "[t]o establish inherency, the extrinsic evidence must make clear that the missing element must necessarily be present in the thing described in the reference, and that the necessity of the feature's presence would be so recognized by persons of ordinary skill" (emphasis in original). However, despite this requirement, which the Examiner acknowledges, the Examiner has still failed to provide factual support for the necessity (or being mandatory) of the limitations that the Examiner asserts to be mandatory. In responding to the Examiner's second assertion, Appellants requested that the Examiner provide case law that supports the

notion that the "the spirit of the design" of the applied prior art is relevant when rejecting a claim under 35 U.S.C. § 102 for anticipation.

The Examiner responded to these arguments in paragraph spanning pages 7 and 8 of the Fourth Office, in which the Examiner asserted the following:

The fourth point of contention remarked upon by the applicant involves the examiner's statement, "when reading prior art, it is important to not only attain a literal interpretation of the disclosure but to also attain an understanding of the spirit of the design." Support for this statement can be found (as requested by the applicant) within the MPEP in section 2144.01, where it clearly states the following:

[cited paragraph from M.P.E.P. § 2144.01 omitted]

Inherency is applied when a feature is known to have to exist for the design to function and that is how inherency has been applied, by the examiner, within this and previous office actions.

The paragraph with the M.P.E.P. cited by the Examiner does not mention "spirit of the design." Instead, the section of the M.P.E.P. cited by the Examiner is entitled "Implicit Disclosure," which describes that a limitation of "about 750-830°C" was met by a reference that only disclosed the claimed process at 700°C because the reference recognized the possibility of using temperatures greater than 750°C.

Appellants note that the Examiner definition of inherency is imprecise (i.e., "[i]nherency is applied when a feature is known to have to exist for the design to function"). To establish inherency, it is not enough that a feature could be used for a particular design to function. Instead, the Examiner must produce factual evidence that the missing feature must necessarily be present for the particular design to function.

---

In the Second Response, claims 1, 3, and 5 were amended to clarify that different ones of location-based service providers specify different formats for receiving requests and Requena fails to teach that the different ones of location-based service providers specify different formats for receiving requests because it appears that Requena teaches that a single preferred format is used. However, as noted by Appellants in the Third Response, these arguments were completely ignored in the Third Office Action.

The Examiner responded to this argument in the first full paragraph on page 8 of the Fourth Office in which the Examiner asserted the following:

Finally, the fifth point of contention remarked upon by the applicant involves the claims that were amended in the amendment received on December 15, 2005. The applicant contends that the examiner completely ignored these amendments. The examiner disagrees with this assertion. The "response to remarks" portion of the last office action clearly states that the office action has been revised to clarify the examiner's position. Plus, the rejection portion of the office action also clearly cites the pertinent portions of the prior art believed by the examiner to teach the newly claimed trait features.

Both the Third and Fourth Office Action were issued subsequent to Appellants amending claims 1, 3, and 5 as described above. Moreover, the statement of rejection in both the Third and Fourth Office Actions are essentially identical. The Examiner's statement of the rejection in the Third and Fourth Office Actions as to the particular limitations at issue in claims 1 and 5 are as follows:

With regards to claims 1 and 5, Requena teaches a method of processing requests from location-based service applications for location-based services provided by a plurality of disparate location-based service providers, different ones of said plurality of disparate location-based service providers specifying different formats for receiving said requests, comprising the steps of the location service: receiving requests for location based-services (Requena teaches a design allowing location based services to receive requests from users (paragraphs 12-16, Requena)) (emphasis added)

As apparent from this passage, the Examiner has not specifically addressed the newly added language, which is underlined. The only "analysis" provided by the Examiner is that statement

that "Requena teaches a design allowing location based services to receive requests from users," which does not address the limitations at issue. Moreover, the Examiner citation of paragraph [0012]-[0016], which were previously reproduced in the present Appeal Brief, does not address the claimed limitation at issue. Appellants, therefore, maintain that the Examiner has again failed to address Appellants' arguments that Requena fails to identically disclose these limitations.

The Examiner's statement of the rejection in the Fourth Office as to the particular limitations at issue in claim 3 are as follows:

With regards to claim 3, Requena teaches a common location-based service adapter interface, comprising: a uniform input interface through which location-based services can be requested using a uniform format which is independent of any specific formatting required by a particular service adapter configured to process said location-based services; and, a uniform output interface through which specifically formatted result sets can be formatted using said uniform format, wherein said uniform input interface adapted to be connected to different service adapters specifying different formats for receiving requests (It is inherent in a networking design that data is converted when transferred between two networked devices. Plus see paragraphs 75, 105 and 130, Requena). (emphasis added)

Upon reviewing this paragraph, Appellants note that the Examiner has somewhat addressed the claimed limitation at issue (the underlined portion above) by asserting that [i]t is inherent in a networking design that data is converted when transferred between two networked devices." The Examiner's inherency argument presumes that Requena teaches formatting is required and that the formatting is performed by a particular entity (in this instance, the uniform output interface). However, as already addressed in the present Appeal Brief, the Examiner has failed to provide factual support for these assertions.

Conclusion

Based upon the foregoing, Appellants respectfully submit that the Examiner's rejections under 35 U.S.C. §§ 112, 103 based are not viable. Appellants, therefore, respectfully solicit the Honorable Board to reverse the Examiner's rejections under 35 U.S.C. §§ 112, 103.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due under 37 C.F.R. §§ 1.17, 41.20, and in connection with the filing of this paper, including extension of time fees, to Deposit Account 09-0461, and please credit any excess fees to such deposit account.

Date: January 17, 2007

Respectfully submitted,

/Scott D. Paul/

Scott D. Paul  
Registration No. 42,984  
Steven M. Greenberg  
Registration No. 44,725  
CUSTOMER NUMBER 46320

**VIII. CLAIMS APPENDIX**

1. A method of processing requests from location-based service applications for location-based services provided by a plurality of disparate location-based service providers, different ones of said plurality of disparate location-based service providers specifying different formats for receiving said requests, comprising the steps of the location service:

receiving requests for location based-services;

determining from each said request a particular location-based service provider which can service said request;

specifically formatting each said request according to a specific format specified by said particular location-based service provider;

uniformly formatting each result set produced from corresponding ones of said requests; and,

forwarding said uniformly formatted result sets to the location-based service applications.

2. The method of claim 1, wherein said uniformly formatted result sets are result sets which have been formatted according to the Geography Markup Language (GML).

3. A common location-based service adapter interface, comprising:

a uniform input interface through which location-based services can be requested using a uniform format which is independent of any specific formatting required by a particular service adapter configured to process said location-based services; and,

and a uniform output interface through which specifically formatted result sets can be formatted using said uniform format, wherein

    said uniform input interface adapted to be connected to different service adapters specifying different formats for receiving inputs.

4. The common location-based service adapter interface of claim 3, wherein said uniform input interface comprises:

    a plurality of location-based service adapter objects, each said adapter object being configured to provide said at least one location-based service responsive to receiving a uniformly formatted location-based service request;

    a location service object configured to provide a reference to a particular one of said location-based service adapter objects based upon a specified location-based service; and,

    a plurality of location request objects configured to define location-based service request parameters required by generic ones of said location-based service adapter objects.

5. A machine readable storage having stored thereon a computer program for processing requests from location-based service applications for location-based services provided by a plurality of disparate location-based service providers, different ones of said plurality of disparate location-based service providers specifying different formats for receiving said requests, the computer program comprising a routine set of instructions for causing the machine to perform the steps of:

    receiving requests for location based-services;

determining from each said request a particular location-based service provider which can service said request;

specifically formatting each said request according to a specific format specified by said particular location-based service provider, and uniformly formatting each result set produced from corresponding ones of said requests; and,

forwarding said uniformly formatted result sets to the location-based service applications.

6. The machine readable storage of claim 5, wherein said uniformly formatted result sets are result sets which have been formatted according to the Geography Markup Language (GML).

**IX. EVIDENCE APPENDIX**

No evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 of this title or of any other evidence entered by the Examiner has been relied upon by Appellants in this Appeal, and thus no evidence is attached hereto.

**X. RELATED PROCEEDINGS APPENDIX**

Since Appellants are unaware of any related appeals and interferences, no decision rendered by a court or the Board is attached hereto.